East Ayrshire Council

North Ayrshire Council

South Ayrshire Council

NHS Ayrshire & Arran

Community Ward

Retrospective matched control study

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Outline

- NHS Scotland
- Community Ward in practice
- Study design
- Patient level costing (PLICS)
- Results
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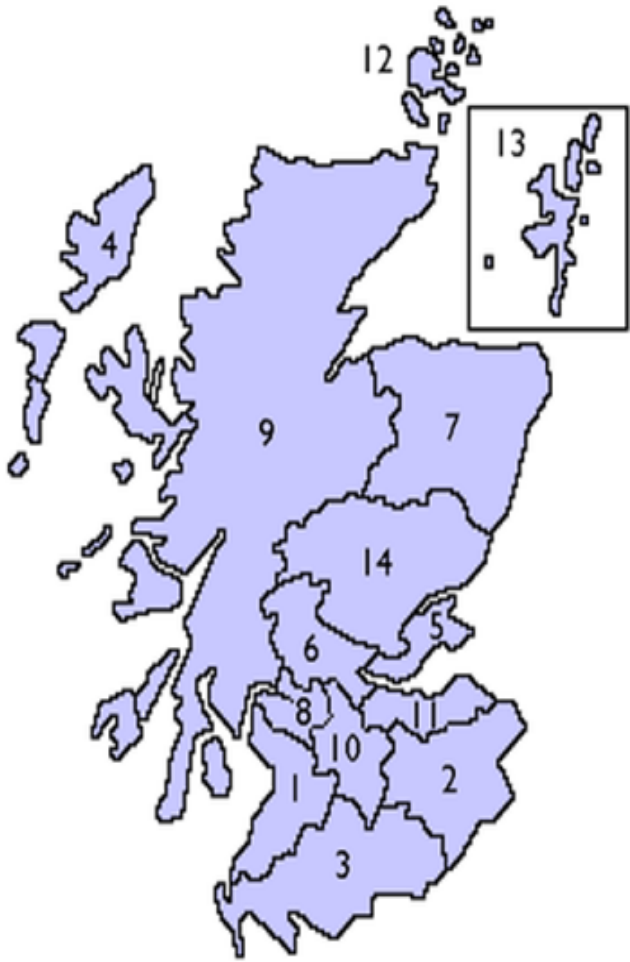
- Conclusions

NHS Scotland

- 5.3 million people
- 14 health boards provide primary and secondary care
- 7 special boards, (Ambulance, NHS 24, Health Scotland, State Hospital, Health Improvement, National Services, Waiting Times Centre.
- 161,656 staff (headcount)

NHS Scotland Health Boards

No	Name
1	NHS Ayrshire and Arran
2	NHS Borders
3	NHS Dumfries and Galloway
4	NHS Western Isles (Gaelic: *Bòrd SSN nan Eilean Siar*)
5	NHS Fife
6	NHS Forth Valley
7	NHS Grampian
8	NHS Greater Glasgow and Clyde
9	NHS Highland
10	NHS Lanarkshire
11	NHS Lothian
12	NHS Orkney
13	NHS Shetland
14	NHS Tayside



Map of the territorial Health Boards

Community Ward in Practice - 1

- 3 virtual wards covering Ayrshire.
- 3 pairs of a GPwSI in Anticipatory & Intermediate Care and a Community ANP (Advanced Nurse Practitioners).
- Working with patients to help them manage their condition and reduce the need for preventable admissions to hospital.
- “Community” because it allows the patient the comfort and stability of their own home
- “Ward” because, although virtual, it works the same as a hospital ward, with team members conducting a daily ward round to review patients’ needs and progress.

Community Ward in Practice -2

- Medical first–responder service Mon to Fri to ensure continuity of support and that ACP plan adhered to.
- Referrals from GPs and hospital consultants as long as a patient's registered GP practice was participating in the service.
- Patients (age>16) with long term condition(s) predisposing them to, or likely to future result in, recurrent or extended hospital admissions:
- Exacerbations of COPD; HF; a progressive neurodegenerative condition or recurrent symptomatic UTIs (many of these patients having SPARRA scores>50%);

Community Ward in Practice -3

- Tailored solution believed likely to work – medication change, self management, enhanced monitoring.
- Solution put into an Anticipatory Care Plan, enhanced/integrated clinical management plan (held in paper notes *and* electronic Key Information Summary).
- Plan adapted over time, responsive to the patient's needs.

Study design

- 142 CW cohort matched to a control group on basis of age, sex, locality, SPARRA, number of long term conditions.
- Patient level data for both cohorts extracted for A&E, and emergency (unscheduled care) for 6 months prior to and after admission to CW.
- Emergency (unscheduled care) costed on basis of patient level costing (PLICS)

Patient level costing (PLICS)

- Transparency around cost drivers across speciality and hospital site.
- Responsive to length of stay.
- Covers range of activity – acute inpatient/day-case.
- Calculated unit costs by allocating fixed and variable costs to patient activity.
- Cost on admission and by day for medical, nursing, pharmacy etc.
- Costs for theatre time by procedure/high costs items.

Results - 1

- CW cohort across three areas achieved reductions in **A&E attendances** of between **45%-54%** (control 25%-37%).
- CW emergency **(unscheduled) hospital admissions** fell by **45%-50%** (control 30%-38%).
- CW cost reduction was £400,000 (control £227,000).
- Greater impact where optimal service access to most appropriate patients in regions where GP Partnerships most engaged.

Results - 2

- Separate qualitative study found:
  - ***Trustworthiness of CW clinicians 98.8%;***
  - ***Overall Satisfaction with CW care provided 98.3%;***
  - ***Respect to patient 97.7%***
  - ***Access to care 97.7% ;***
  - ***Provision of information (97.1%) &***
  - ***Involvement in care decisions (90.7%)***

Limitations

- Small sample.
- Robust matching but difficult to control for all bias/confounding factors.
- Impact on social (long term care).
- Reflects the real wold realities of short term funded pilots.

Conclusions

- Decline in hospital activity (resource) across CW areas.
- Cost effective and appropriate use of scare health resources.
- Achieved patient-centred care; popular with patients, relatives, primary and secondary care healthcare staff.
- Sufficient time for proactive intensive medical support and problem solving, developing enhanced ACPs that actually worked.
- Targeting support to the most appropriate (and costly) SPARRA patients.

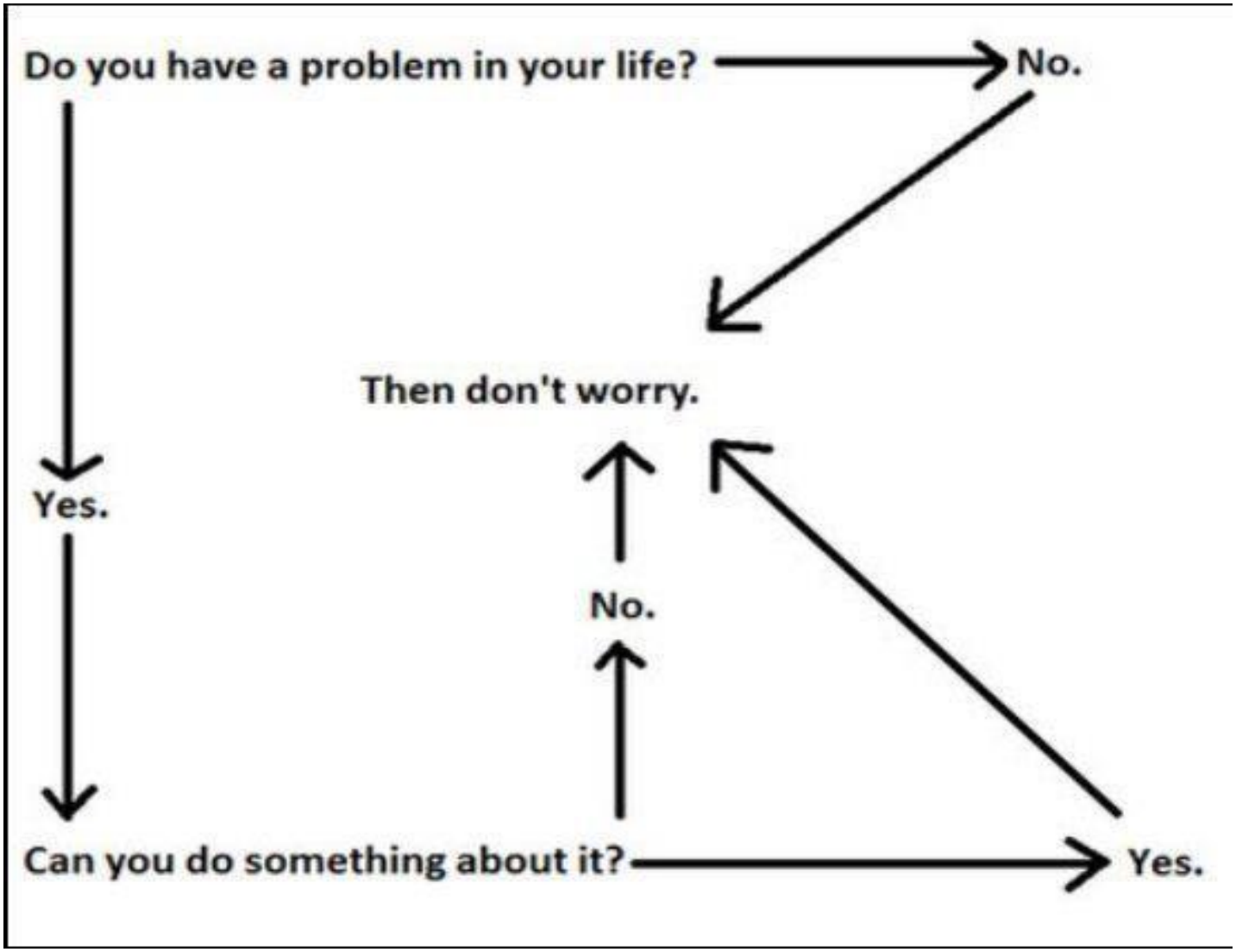
Example of the partial cost-benefits of targeting care to just one Community Ward patient:

75 year old patient with advanced Parkinson's Disease, Diabetes and recurrent urinary and intra-abdominal sepsis. Admitted to the North Community Ward on 13/12/12 as an alternative plan to NHS Long Term Care, agreed with his Consultant Geriatrician, having previously required hospital inpatient care for 4 months in 2012. An ACP was designed for him based on his history and supported by regular CW clinician visits. One year later, he hadn't required a single admission to hospital. As *one* patient, NHS *bed occupancy cost alone* to NHSA&A from 13/12/12 over one year would have been (if one were to take a long term care NHS bed costing ~£250 a day) *£91,250* for one patient (excluding the potential that the patient might have been transferred into an Acute hospital bed at any point at ~£400 a day).

Outcomes for Community Ward Patients in the 6months before and 6months during Community Ward intervention compared with a local, age and SPARRA-matched control patient cohort receiving conventional NHS care.

NHS Ayrshire and Arran Acute Activity
Community Ward intervention group versus SPARRA matched control cohort
Table 1 - Six months

	6 months Before entry to CW service							6 months from date of entry to CW service						Difference				
	Number in cohort[1]	Number of Patients Attended A&E[2]	Total Number of Attendances[3]	Number of Patients Admitted[4]	Total Number of Admissions[5]	Total Number of Bed Days[6]	Total Cost[7]	Number of Patients Attended A&E[2]	Total Number of Attendances[3]	Number of Patients Admitted[4]	Total Number of Admissions[5]	Total Number of Bed Days[6]	Total Cost[7]	A&E Attendances	Emergency Admission	Bed Days	Total Cost[8]	CW Total Saving[9]
East CW	47	37	164	38	142	790	£345,929	28	90	27	78	579	£242,215	45.1%	45.1%	26.7%	£103,715	
North CW	44	35	92	35	82	1152	£449,473	26	42	24	41	728	£278,297	54.3%	50.0%	36.8%	£171,176	
South CW	51	43	128	40	110	742	£315,063	30	64	25	56	457	£188,590	50.0%	49.1%	38.4%	£126,473	
CW Cohort	**142**	**115**	**384**	**113**	**334**	**2684**	**£1,110,465**	**84**	**196**	**76**	**175**	**1764**	**£709,102**	**49.0%**	**47.6%**	**34.3%**	**£401,363**	
East Control	47	28	70	26	59	543	£221,587	22	44	21	38	255	£108,299	37.1%	35.6%	53.0%	£113,288	-£9,574
North Conrol	44	27	59	27	57	403	£167,796	20	44	16	35	329	£134,645	25.4%	38.6%	18.4%	£33,151	£138,025
South Control	51	25	49	26	47	478	£190,914	23	37	23	33	267	£110,097	24.5%	29.8%	44.1%	£80,817	£45,655
Control Coh	**142**	**80**	**178**	**79**	**163**	**1424**	**£580,297**	**65**	**125**	**60**	**106**	**851**	**£353,041**	**29.8%**	**35.0%**	**40.2%**	**£227,256**	**£174,107**


Do you have a problem in your life?
No.
Then don't worry.
Yes.
No.
Can you do something about it?
Yes.